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ABSTRACT

This paper is based on the premises that comprehensive career development programs for kindergarten through post-secondary and adult education must be developed in order to meet individual and societal needs, and that for many youth, career development experiences represent a core around which other school experiences might be organized and made meaningful. In considering these premises, the following topics are discussed: (1) career development needs at various educational levels, (2) sequential career development objectives at different educational levels for six dimensions, including self-characteristics, occupational area, educational avenues, decision making, economic and social values of work, and psychological and sociological meaning of work, (3) assumptions and developmental tasks to consider when organizing the school around a career development theme, (4) five operational principles regarding curriculum development, staff organization, and preparation, and (5) nature, structure, and implementation patterns at different educational levels. Several recommendations concerning career development programs are included. (SB)

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**Career Development Education K Through
Post-Secondary and Adult Education**

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Introduction

The 1968 Vocational Education Amendments introduced a developmental concept of Vocational Education and nowhere is this clearer than in the Congressional definition of Vocational Education as contained in the Act itself.

"The term 'vocational education' means vocational or technical training or retraining--designed to prepare individuals for gainful employment as semiskilled or skilled workers or technicians or subprofessionals in recognized occupations and in new and emerging occupations or to prepare individuals for enrollment in advanced technical education programs--and such term includes vocational guidance and counseling (individually or through group instruction) in connection with such training or for the purpose of facilitating occupational choices; instruction related to the occupation or occupations for which the students are in training or instruction necessary for students to benefit from such training; job placement; --"

This definition of Vocational Education and the various subsections contained in the 1968 Vocational Education Amendments and in particular the Exemplary Section of the Act serve to expand the range of activities and purposes that can be considered as vocational. The Exemplary Section of the Act makes possible the funding of career orientation program at the elementary school level. The broadening role that has been given to vocational education is the result of major changes that have occurred in our society. For vocational education to carry out its broadening responsibilities a restructuring of thinking regarding the scope, focus, level, and setting of vocational education towards a comprehensive and articulated structure will be required.

Under a broadening umbrella vocational education should be able to put aside many of those issues that have served to divide and consume its energies in the past and to formulate a comprehensive and developmental program design for vocational education as a central part of the total educational system. Vocational education should be able to resolve in positive ways the following kinds of issues: First, to more clearly differentiate between the intent, nature, and structure of vocational education at the secondary and post-secondary levels and to develop roles for vocational education at the elementary and junior high school levels. Secondly, to devise vocational education program designs that will meet varying levels of individual needs from the highest level of technical training to those needing only a couple of weeks preparation for entrance into the world of work. Third, to resolve the issues between trade and industrial education and industrial arts because under the umbrella of the 1968 Amendments a role for both can be defined. Fourth, to find ways to make maximum use of our resources for the maximum numbers of students. Fifth, to find ways to resolve the narrow service line concept as compared to a comprehensive concept of vocational education. Sixth, to find ways for integrating those proven elements of vocational education into the total school effort in such a manner as to render school experiences more meaningful for all students.

This paper is based on the premises that comprehensive programs for "career development" from K through post-secondary and adult education must be developed in order to meet certain individual and societal needs and that for many youth "career development experiences" represent a core around which other school experiences might be organized and made meaningful. In order to adequately consider these two premises the following major topics will be discussed: Topic I: Need for Career Development Activities K Through Post-Secondary; Topic II: Organizing the School Around a Career Development Theme; Topic III: Operational Principles for Developing and Organizing the School Around a Career Development Theme; Topic IV: Nature, Objectives, and Activities for Career Exploration K Through Post-Secondary and Adult Education; Topic V: Summary of Career Development Activities; and Topic VI: Conclusions, Recommendations, and Implications.

In this paper the terms "career development education" and "vocational education" will both be used to mean:

- a. providing all individuals with experiences designed to facilitate career decision making in the immediate or more distant future.
- b. providing all individuals with experiences of orientation, exploration, or prevocational in nature.
- c. providing individuals with experiences designed to prepare the individual for employment in a specific occupation or cluster of occupations below the bachelor level, or for higher level vocational training, or designed to assist the individual in planning for, and in making the transition to, the next step whether that next step be work or further vocational education.
- d. providing individuals with assistance to re-enter education in order to obtain a new or higher job skill.
- e. providing individuals with both direct and supportive instruction and service that is necessary to enable individuals to acquire a job skill.

Topic I

Need For Career Development Activities K Through
Post-Secondary And Adult Education

For large numbers of American youth, the public school system represents a maze of meaningless activity leading nowhere. They fail to see any relationship between their current school experience and some identifiable next step. An objective appraisal of the outcomes of education reveal that the irrelevance and lack of specific purpose of education for many youth can be readily documented. For example, one study published by the U. S. Office of Education (Grant, 1965) indicated that for every ten pupils in the fifth grade in 1957-58, 9.4 entered the ninth grade in 1961-62; 8.1 entered the eleventh grade in 1963-64; 7.1 graduated from high school in 1965; 3.8 were expected to enter college in the fall of 1965; 1.9 would likely earn baccalaureate degrees in 1969. Thus approximately 30 percent of American children leave education before high school graduation. These statistics include students with average and above average intelligence who found the public school system to be meaningless. Such a view is not restricted to those who drop out. These statistics reflect that work is the next step beyond high school for approximately 50 percent of the nation's youth. This transition is too important to be left to "chance." Several studies reveal that these youth are not receiving assistance in obtaining the base of understanding necessary for making and implementing "reasoned" educational and vocational goals (Gribbons and Lohnes, 1968; Campbell, 1968). Finally, the number of students who enter but fail to complete college and the number who complete without definite career goals certainly demonstrate that these youth also need assistance in facilitating their career development. Too often such youth view college as the end rather than as a means to some definite end. Education at any level should be evaluated in terms of the extent to which students are prepared for and are assisted in taking the next step.

It can be concluded from research that students at all levels of education have career development and choice-making needs and that many students will need special assistance if they are to plan steps which will lead them to their goals, to personal clarification, or to a sense of the vocational and social context with which they must cope (Herr, 1969). Examples of students' career development needs at different levels of education are presented as follows. At the elementary level the students have need for:

- acquiring positive attitudes and accurate impression of work.
- making certain decisions and developing decision-making skills.
- developing interpersonal relationship skills.
- identifying with a variety of role models and an understanding of significance of each to the community as a whole.
- being exposed to a wide range of occupations.

- experiencing success within the school context.
- being recognized as an individual.
- participating in a variety of learning activities including those of a concrete nature.
- being accepted by his peers.
- broadening their base of knowledge of self, work, and education beyond the limitation of their immediate environment.
- participating in action oriented career related activities to enable them to feel what a job is like.

At the junior high school level the students have additional needs for:

- exploring several broad occupational areas in depth through concrete or simulated experiences.
- considering the social and personal meaning of work.
- understanding the relationship between education and work.
- seeing how available education resources can lead to different objectives.
- understanding and differentiating one's self characteristics such as abilities, interests, values in terms of their relationship to others and to broad occupational areas.
- recognizing self and environment limiting and facilitating factors and considering how these factors can be maximized for their benefit.
- understanding that career development is a process over which they have control.
- perceiving the dignity and respect of all work.
- understanding the use of tools, materials, and processes in certain broad occupational areas and the ability to apply this understanding in elementary work tasks.

At the secondary level students have additional needs for:

- being enrolled in an open educational system.
- recognizing that indecision is not tant amount to failure.
- recognizing and controlling the environment variables which impinge upon the decision-making continuum.

- acquiring the self discipline, education skills, and understanding needed to perform successfully in adult roles.
- exploring a particular occupational area in greater depth through reality testing in concrete or simulated experiences.
- differentiating and understanding the many settings in which one may pursue a particular type of work.
- preparing oneself for his next step whether it be work or further education or both.
- developing specific plans for the next step.
- learning how to become involved in a variety of work and work related activities.
- acquiring skills and knowledge necessary to successfully pursue their selected next step.
- feeling that the school is interested in them.
- approaching work in a meaningful and purposeful manner.
- receiving help in obtaining and adjusting to a job.
- making school experiences occupationally relevant.

At the post-secondary and adult level students have additional needs for:

- obtaining access to a type of education that will enable them to implement their career objectives.
- receiving assistance in selecting from the options of a particular institution that which will enable them to reach their career objectives.
- acquiring work attitudes and a job skill.
- implementing successfully their transition from education to work.
- identifying career ladders in particular work settings, and taking steps necessary to move up the job ladder.

The need for the school to initiate activities designed to meet the career development needs of youth at different age levels is supported by several changes that have and are occurring in our society.

First, as our society has progressed from a simple to an exceedingly complex society we have virtually eliminated the traditional means by which adolescents develop into working adults. In former years youth were constantly surrounded by and early involved in work. However, with the passing of the agrarian culture and the smart factories and businesses within the home, work as an activity has

become increasingly less a part of the lives of youth until now it is chiefly an activity engaged in behind fences and brick walls. Too often the results have been that many youth are reaching the age for entering work without an adequate and realistic knowledge about jobs available without the job attitudes and industrial discipline necessary for job success, without being familiar with the tools, materials and processes of work setting, and without the cognitive skills necessary to perform in a job. Such youth are unable to enter and hold many of the basic entry level jobs because of a lack of these skills. For other youth in particular, the more intelligent and better educated some come to doubt the puritan ethic of work for its own sake; while others even question the need for work for any purpose in a technological society, some have reached early adulthood without a reason for being and thus to find meaning they are subject to participate in whatever movement that is popular at a particular time; while others have failed to acquire the self discipline and social responsiveness necessary for maintaining an orderly society and their very behavior seeks to create a state of chaos. It is their greater knowledge and understandings that have caused young people to discover flaws and imperfections in our institutions of education, business, and government. To want to eliminate these weaknesses, to want to attack the status quo is both commendable and essential so long as these ends are sought in a constructive rather than a destructive manner. It is essential that as a part of growing up these youth be provided with experiences that enable them to perceive the psychological meaning that work can have for the individual, to examine benefits of different forms of work to our society, to acquire a sense of responsibility and self discipline necessary to make needed changes in our institutions in constructive ways, and to know enough about our economic and social system from first hand experience to understand how changes are made in constructive ways. Thus classroom walls must be extended to include community activities for the newcomer. No longer can we afford to deny to these youth the kinds of experiences that in the past were a natural part of growing up.

Second, the nature of more and more occupations are such that increasingly greater emphasis is being placed on the cognitive and affective aspects related to work rather than on the manipulative or motor skills aspects. There has been a substantial decrease of individuals employed in blue collar occupations with less than a high school diploma. Fulmer (1968) in a study of 232 occupations in Louisville, Kentucky confirmed that work attitudes and the ability to apply basic academic skills were the major prerequisite for many jobs. Many of these jobs were developed as a result of the increased specialization in our society which was caused by consolidation of business and industry into larger units. A public education system that has been geared to an education goal and approach more appropriate for preparing youth for college has failed to prepare many of today's youth for entrance into the world of work.

Third, entrance into a job today is further complicated by the way in which society views work. Man is no longer judged by how much he does but by what he does. Too often today worthy work is judged to be that which requires a college degree. This change in the way work is viewed by society has created problems of motivating individuals to enter many of the jobs that exist. In order for man to adjust to the increasingly cosmopolitan native of our society he must perceive a sense of belonging, worthwhileness, and a respect for old value for others and theirs can only come about when individuals come to know, understand, and appreciate other individuals and their roles. Fulmer, John L., "Jobs For All--Opportunity For All In The Louisville Job Market," speech to area school directors, summer, 1968.

Fourth, continued technological changes, shifts in governmental priorities, and economic fluctuation are factors with which the workers must learn to deal if he is to maintain employment.

These societal changes make it imperative that the school accept the responsibility for systematically preparing the individual to enter the world of work.

It would be a mistake to assume that identified student needs can be met through any attempt less than a restructuring of all aspects of the school environment including both the content and processes of education. Vocational educators should avoid allowing themselves to believe that they can meet these needs of students while the remainder of the school stays like it is. In my opinion, they will fail miserably unless their effort is merged with that of the total school. Identified student needs are not unique to career development nor are they new for they are and have been for some time a central part of our educational rhetoric in our attempt to develop the whole individual. To meet these needs will require educators, including vocational educators who are willing to make the student their primary commitment and to make secondary their commitment to a particular type of education, setting, discipline, subject matter content, process or specialization.

Topic II

Objectives for a Career Development Education Program

The following pages contain a listing of possible career development objectives that have been stated broadly at different educational levels under six different dimensions. Too often the focus is on one or two of these dimensions rather than all. These six dimensions represent different threads through a sequential career development education program and the failure to focus on one or more dimension could leave a major gap. The different dimensions as states do have considerable overlap. Both the statement and concepts as presented need further refinement.

These objectives for each dimension range on a continuum as shown below.

1. Self-characteristics - From recognition of likes and dislikes to development of self-characteristics appropriate for a given occupation.
2. Occupational area - From recognition of observable jobs in the community to obtaining preparation for and entrance into a specific job.
3. Educational avenues - From recognition of relationship between subject matter and observable community jobs and to acquire education necessary for entrance into a chosen field.
4. Decision-making - From recognition of factors that influence decision to making and successfully implementing a career choice.
5. Economic and social values of work - From recognition of economic and social contribution of parents' occupations to the selection of an occupational and work setting that he considers appropriate for him.
6. Psychological and sociological meaning of work - From expressing positive attitude toward self, others and school to the involvement in a meaningful and purposeful manner with work and work related activities.

SEQUENTIAL OBJECTIVES FOR A CAREER DEVELOPMENT EDUCATION PROGRAM

	ELEMENTARY K-6	JUNIOR HIGH 7-9	SECONDARY 10-12	POST-SECONDARY AND ADULT
Self-Characteristics	<p>The student recognizes those activities that he most likes, that he performs best, and that give him greatest satisfaction and can identify occupations in which the performance of similar tasks would be required.</p>	<p>The student further differentiates his self-characteristics (interests, values, abilities and personality traits) from those of others, and can identify broad occupational areas and levels that may be more appropriate for him.</p>	<p>The student further self-characteristics (interests, values, abilities and personality traits) by either preparing himself for an entry level job or by exploring particular occupations in greater depth through reality testing in concrete or simulated experiences and by consistently checking his perception of self with those of the actual experience and by making appropriate modification.</p>	<p>The student considers self characteristics in making a choice of the type of post-secondary institution to enter, in making choice of program to pursue within the chosen institution and in developing self characteristics appropriate for a particular job.</p>
Occupational Areas	<p>The student at the lower elementary level can identify most observable occupations in the community and can state the contribution made by each to the well being of the community.</p>	<p>The student differentiates between the several broad occupational areas in terms of (1) a potential satisfaction each might offer him, (2) the nature of work tasks performed, (3) the future impact</p>	<p>The student can differentiate between the major occupations that make up a broad occupational area and can make some differentiation of these occupations in terms of</p>	<p>The student identifies the occupational field and level he plans to enter and obtains necessary preparation.</p>

Educational
Avenues

The student at the middle and upper elementary level demonstrates how certain knowledge and skills acquired in different school subjects are applied in different work roles.

The student identifies the different educational areas both in the immediate and more distant future that are available, the nature and purpose of each, the avenue toward which each can lead, and tentatively assesses the value each offers him in terms of his possible vocational choices. He demonstrates how knowledge and skills acquired in different subject matter areas relate to performing different work roles.

The student differentiates among the different types of post-secondary educational avenues available (military, college, vocational-technical, private schools, apprenticeship, nursing school, on-the-job training) in terms of (1) the accessibility of each to him, (2) the potential of each to help him achieve his career objective and life style. The student selects a post-secondary avenue and selects the institution or setting by considering (1) cost, (2) quality, (3) entrance standards, etc.

The student enters his chosen post-secondary institution and selects the course of study that will enable him to implement his career objectives.

Out-of-school youth and adults become productive persons and/or if necessary seek and obtain the assistance and education required to become a more productive person.

Elementary
K-6Junior High
7-9Secondary
10-12Post-Secondary
and Adult

The student at the middle and upper elementary levels broadens his contact with workers beyond the school and those readily observable in the community. He can identify persons in various occupations, and can make some differentiation between occupational skills used by different individuals, the prerequisite skills needed to enter these occupations, and of the contribution each makes to our society.

technology might have on particular occupational areas, (4) the contribution and importance of particular occupational areas to our society, and (5) the future demand for workers in broad occupational areas.

(1) the amount and type of education needed for entrance; (2) the content, tools, setting, products or services of these occupations; (3) their value to society; (4) their ability to provide him with the type of life style he desires; (5) to what extent they can satisfy his interests and values; and (6) in what ways they do and do not seem appropriate for him.

The student selects an educational course in light of his tentative broad career choice.

Dimension of
Career
Development

Elementary
K-6

Junior High
7-9

Secondary
10-12

Post-Secondary
and Adult

Decision
Making

The student at the upper elementary level begins to differentiate those self characteristics and environmental factors that can have impact upon his future, and begins to discuss ways in which others have minimized negative factors and have maximized positive ones.

The student identifies future decisions he must make in order to reach different goals. He identifies those personal and environmental efforts that impinge upon his future decisions. He assesses possible steps he might take in minimizing negative factors and maximizing positive ones and considers the possible consequences each has for him.

The student develops more specific plans for implementing his career purposes.

The student executes plans to qualify for entry level jobs by taking appropriate courses at the high school level, by on-the-job training, or by pursuing further training in college or post-secondary vocational education leading toward qualification for some specific occupation.

The student either successfully follows through on his original choice or chooses and pursues another.

The student completes his chosen educational plan and successfully implements his next step.

Out-of-school youth and adults become productive persons and/or if necessary seek and obtain the assistance and education required to become a more productive person.

The adult continues to seek out and participate in activities necessary to remain a productive person and to progress in his career.

Dimension of
Career
Development

Elementary
K-6

Junior High
7-9

Secondary
10-12

Post-Secondary
and Adult

Out-of-school youth
and adults make
satisfactory progress
in pursuit of their
career purposes.

The student considers
the different indus-
tries that would allow
him to implement his
career objectives in
terms of the economic
and social contribu-
tions each makes to
our society.

Economic and
Social Values
of Work

The student can state
economic and social
contributions made
by his parents occu-
pations, those occu-
pations within the
school, the most ob-
servable occupations
in the community and
those beyond the ob-
servation of the
immediate community.

The student gains greater
understanding of the
economic and industrial
systems by which goods
and services are pro-
duced and distributed
and differentiates the
economic and social
significance of each
occupational area
considered.

The student differ-
entiates among the
major industries
in terms of the
economic and social
significance of
each.

The student considers
the different indus-
tries that would allow
him to implement his
career objectives
in terms of the
economic and social
contribution each
makes to our society.

Psychological
and
Sociological
Meaning of
Work

The student, during his school activities, expresses a positive attitude toward self, others, educational programs and different types of work roles.

The student discusses the importance of team work in different work settings, cooperates with others in order to reach a common goal and can express the importance of his contributions and that of others in reaching a common goal.

Students see work as a way of adding meaning to the lives of most persons and as a way of gaining many social rewards. He recognizes the personal and social significance that work has in the lives of individuals at varying levels within the occupational structure.

The student becomes involved in a meaningful and purposeful manner with work and work related activities in a broad occupational area at a particular level.

The student becomes involved in a meaningful and purposeful manner with work and work related activities in his chosen field.

Topic III

Organizing The School Around A Career Development Theme

One way of rendering school experiences more relevant to the needs of large numbers of students, if indeed not all students, is to organize the school around a career development theme. This can be accomplished by fusing the more promising programs and practices of vocational education with the broader curriculum, with the guidance program, and with community resources in order to facilitate the student's career development and acquisition of other skills and understanding. The total school should be involved in the creation of an environment wherein all students do in fact acquire skills, knowledge, understandings, and attitudes necessary for career development.

There are other concerns such as the proper use of leisure time and the establishment of sound interpersonal relationships which also should be stressed throughout the school experience. The effort to infuse the curriculum and the guidance program with career development interests is not intended to preclude concern for these other important aspects of life. Rather it is the recognition that all students need help with career development. Not only do students need such help, they want it! Studies which examine the elementary and secondary student's concern for his career development repeatedly conclude that he is strongly interested (Campbell, 1968). Efforts to demonstrate the relationship between courses of study and the world of work are likely to render the teaching of such subjects more relevant to student interests. Six assumptions underlie this effort to develop the school around a career development theme:

career development education is the right of everyone and it is the responsibility of the school to provide it;

career development education, like general education, is a responsibility of the total school and cannot be limited to a single discipline or department;

career development education programs can be developed which serve as nonblocking career ladders, and they can be planned to be consistent with the goals of education;

career development education should be a continuous process from early childhood throughout life;

career development education provides more opportunities than other aspects of education for youth to perform adult work roles which are essential to promoting the career development of youth;

career development education experiences can serve as a vehicle for teaching basic academic skills to those youth whose learning activities are less appropriate for highly abstract learning experiences.

Concern for career development cannot be a one-shot approach that takes place at the junior or senior high level. It is too late when the student reaches the point of making the transition from school to work. Career development should be conceived of as a pyramid offering a broad base of exploratory experiences at the elementary and junior high school levels and gradually narrowing to a decision point as the student acquires appropriate preparation for his next step beyond school. Such a vocational development theme could serve as a common thread to unify the educational effort at all levels. The National Advisory Council (1968) suggested certain desirable characteristics of a vocational-developmental curriculum.

Occupational preparation should begin in the elementary schools with a realistic picture of the world of work. Its fundamental purposes should be to familiarize the student with his world and to provide him with the intellectual tools and rational habits of thought to play a satisfying role in it.

In junior high school, economic orientation and occupational preparation should reach a more sophisticated stage with study by all students of the economic and industrial systems by which goods and services are produced and distributed. The objective should be exposure to the full range of occupational choices which will be available at a later point and full knowledge of the relative advantages and the requirements of each.

Occupational preparation should become more specific in the high school, though preparation should not be limited to a specific occupation. Given the uncertainties of a changing economy and the limited experiences upon which vocational choices must be made, instruction should not be overly narrow but should be built around significant groupings of occupations or industries which provide expanding opportunities. All students outside the college preparatory curriculum should acquire an entry level job skill, but they should also be prepared for post high school vocational and technical education. Even those in the college preparatory curriculum might profit from the techniques of "learning by doing." On the other hand, care should be taken that pursuit of a vocationally oriented curriculum in the high school does not block the upward progress of the competent student who later decides to pursue a college degree.

Occupational education should be based on a spiral curriculum which treats concepts at higher and higher levels of complexity as the student moves through the program. Vocational preparation should be used to make general education concrete and understandable; general education should point up the vocational implications of all education. Curriculum materials should be prepared for both general and vocational education to emphasize the relationships.

Some formal post-secondary occupational preparation for all should be a goal for the near future. Universal high school education is not yet achieved but is rapidly approaching reality.

Activities selected to promote career development should reflect the developmental needs of students at different age levels. For this purpose Havighurst's concept (1953), developmental task, is most promising. He has defined a developmental task as "...a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to happiness and success with later tasks, while failure leads to unhappiness in the individual, disapproval by society, and difficulty with later tasks." He has identified stages of vocational development along with developmental tasks associated with each stage. Listed below are his stages along with developmental tasks associated with stages I and III to serve as examples.

<u>Stages of Vocational Development</u>	<u>Ages</u>
<p>I. <u>Identification with a Worker</u></p> <p>Father, mother, other significant persons.</p> <p>The concept of working becomes an essential part of the ego-ideal.</p> <p>Principle Developmental Tasks of Middle Childhood:</p> <ol style="list-style-type: none"> 1. Developing fundamental skills in reading, writing and calculating.. 2. Learning physical skills necessary for ordinary games. 3. Learning to get along with age-mates. 4. Learning an appropriate masculine or feminine social role. 5. Developing concepts for everyday living. 6. Developing conscience, morality, and a scale of values. 7. Achieving personal independence. 	5-10
<p>II. <u>Acquiring the Basic Habits of Industry</u></p> <p>Learning to organize one's time and energy to get a piece of work done. School work, chores.</p> <p>Learning to put work ahead of play in appropriate situations.</p>	10-15
<p>III. <u>Acquiring Identity as a Worker in the Occupational Structure</u></p> <p>Choosing and preparing for an occupation.</p>	15-25

Getting work experience as a basis for occupational choice and for assurance of economic independence.

Principle Developmental Tasks of Adolescence:

1. Achieving new and more mature relations with age mates of both sexes.
2. Achieving a masculine or feminine social role.
3. Achieving emotional independence of parents and other adults.
4. Achieving assurance of economic independence.
5. Selecting and preparing for an occupation.
6. Acquiring a set of values and an ethical system as a guide to behavior.
7. Preparing for marrying and selecting a mate.
8. Starting a family.
9. Getting started in an occupation.

IV. Becoming a Productive Person

25-40

Mastering the skills of one's occupation.

Moving up the ladder within one's occupation.

V. Maintaining a Productive Society

40-70

Emphasis shifts toward the societal and away from the individual aspect of the worker's role. The individual sees himself as a responsible citizen in a productive society. He pays attention to the civic responsibility attached to his job. He is at the peak of his occupational career and has time and energy to adorn it with broader types of activity. He pays attention to inducting younger people into stages III and IV.

VI. Contemplating a Productive and Responsible Life

70 +

This person is retired from his work or is in process of withdrawing from the worker's role. He looks back over his work life with satisfaction, sees that he has made his social contribution, and is pleased with it. While he may not have achieved all of his ambitions, he accepts his life and believes in himself as a productive person (Havighurst, 1964).

Information of the type Havighurst has furnished us should help in determining the nature of a career development activity at a given educational level. One could infer from such conceptualization that the school experiences aimed at vocational development should look something like the following.

<u>Nature of Vocational Experiences</u>	<u>Educational Level</u>
I. Informational and orientational	Elementary
II. Orientational and exploratory	Middle school
III. Exploratory and preparational	Senior high or college
IV. Upgrading and retraining	Continuing education

The school must not only provide an opportunity for the expression of personal characteristics important to career development, it must deliberately set out to develop them. Development of personal characteristics must not be left to happenstance. A series of exposures to career development-oriented activities adapted to the developmental level of children and youth around which the different subject matter fields are related will have an impact that isolated, compartmentalized, random experiences can never have. This is what is meant by a curriculum developed around a career development theme--a curriculum which has considered the importance of career development and has carefully provided well articulated experiences at all levels to foster it. In addition, these experiences have been used as a vehicle in making relevant other aspects of the school program.

What is explicitly not being recommended is a separate vocational tract to begin earlier than that which presently exist. Indeed, results stemming from current vocational tracking have proven somewhat unsatisfactory since they are often offered the student in lieu of general education. Students have been arbitrarily separated into supposedly homogeneous categories for each category have been seen as mutually exclusive. As a result, vocational education has been viewed as a second class alternative for those with low verbal skills or for those with technician interests rather than a necessary part of the education of all students. Many vocational students and vocational educators have become defensive about their alleged inferior status, have increased their isolation and have tied themselves to training experiences rigidly defined by time and content. Consequently, many students who desperately need what vocational education can offer have been blocked from their access.

The curriculum must provide for free movement between the academic and vocational aspects of education. The criteria for such movement should include the student's needs, interests, readiness, and motivation. The complexity of modern living suggests the dire necessity for all students to gain the benefits of a broad, general education. However, for many students this general preparation loses much of its meaning when he fails to see a practical application for it. What is needed is an educational system which provides broad, general training around practical needs such as vocational development.

BIBLIOGRAPHY

Advisory Council on Vocational Education, Vocational Education--The Bridge Between Man and His Work, Highlight and Recommendations from the General Report Publication, Washington, D. C.: U. S. Office of Education, 1968.

Campbell, Robert E., "Vocational Guidance In Secondary Education: Selected Findings of a National Survey Which Have Implications for State Program Development." Paper presented at the National Conference on Vocational Guidance: Development of State Programs, U. S. Office of Education, Washington, D. C., January 16-18, 1968.

Grant, Vance W., "Statistic of the Month," American Education, July-August 1965, Back cover.

Gribbons, Warren D. and Lohnes, Paul R., Emerging Careers. New York: Teachers College Press, Columbia University, 1968.

Havighurst, R. J., Human Development and Education. New York: Longmana, Green and Co., 1953.

Havighurst, Robert J., "Youth in Exploration and Man Emergent," Man in a World at Work (Henry Borow, Ed.). Boston: Houghton-Mifflin Co., 1964. Chapter 10, pp. 215-236.

Herr, Edwin L., "Unifying an Entire System of Education Around a Career Development Theme." Paper presented at the National Conference on Exemplary Programs and Projects, Dinkler Plaza Hotel, Atlanta, Georgia, March 12-14, 1969.

Topic IV

Operational Principles for Organizing the School
Around a Career Development Theme

The development of an educational program organized around a career development theme entails, among other things, a consideration of certain basic operational principles regarding curriculum development, staff organization, and preparation. Although the charge of organizing the school around a career development theme is a challenging one it should not be any more difficult than the task faced by any curriculum developer at any level who contemplates new goals and new directions for the educational program.

The first principle that merits attention in organizing the school curriculum around a career development theme from K through 12 is to define goals and objectives of the curriculum in terms of the needs and interests of the student at different stages of development. Such a statement may seem trite because it has been a major part of our education redic; however, the evidence around us would indicate that it has more often been talked about than practiced.

A prespecification of desired end behavior should serve as guides for the direction of the instructional process, as well as basis for determining if the instructional process has been successful.

Abstracts of global concepts are not sufficient for this purpose. They must be broken down into their components with enough specificity to make them usable by curriculum developers and evaluators alike. For example, it is one thing to phrase an objective as follows: "to give students an understanding of the observable occupations in the community." It is quite different to state the same objectives in behavioral terms as follows: "The learner will be able to select from 25 pairs of pictures the one that is a community worker and to state how the worker contributes to the well being of the community about which he has observed and discussed in class." The latter statement is better because it suggests the process of teaching and learning which follows from the objective, as well as specific behavior and knowledge which can be used to evaluate the extent to which the objective has been reached.

A second principle is that career development goals and activities must be considered within the context of all the goals of the school at different levels. It is impossible to separate career development goals from the educational, personal, social, and civic development of the individual. A strogity that isolates career development goals and activities from other curriculum areas will result in an add on curriculum strategy that will further intrench a curriculum model in which greater emphasis is placed on subject matter than on the individual. In order to fuse career development activities into the school curriculum, the approach must first include an assessment educational objective and 7 learning activities to see how they might be exploited to accomplish different career development objective, and secondly new learning activities identified to facilitate both career development objectives as well as other educational objectives. Such an approach would allow the school to take advantage of the natural motiva-

tion that exist on the part of many youth toward work, and could serve as a vehicle for organizing the total school curriculum so that it has psychological meaning to the student.

A third principle is that career development experiences must be sequentially organized for learners from K through post-secondary and adult in such a way to maximize the likelihood of the achievement of career development goals. The first step becomes one of having goals which are based both upon the developmental needs of students at various age levels and upon the nature of the knowledge to be learned. The second step becomes one of identifying and implementing a series of experiences and activities which lead toward the achievement of career development goals. Consequently, the nature and structure of the career program may vary from one level of education to the next.

The fourth principle is that framers of developmental career development programs must take into consideration the individual's readiness level regarding career development. Thus considerable attention must be given to diagnosing where each student is in his career development. This will necessitate knowledge of what students have already learned or experienced, the general level of his intellectual, social and emotional maturity. The range of individual differences will necessitate a large number of career development learning experiences that can be related to the individual needs and capacities. Furthermore, it will necessitate that the program be flexible enough at each level to start with the individuals level of accomplishment.

The fifth principle is that in designing career development activities concrete experiences and learning must precede learning of the abstract and that such experiences must be used to either reinforce or initiate other school learning. In the case of career development opportunities for concreteness and direct experience rather than abstraction and vicarious experience are numerous and should be capitalized upon at all points. It is likely that many youth may develop through adolescence without every completely reaching the stage of abstract thinking.

Topic V

Nature, Structure, and Implementation of Career Development Education K Through Post-Secondary and Adult

In order to organize the school for many youth around a career development theme considerable attention must be given to the nature, structure, and implementation patterns at different levels of education. An attempt is made to present the elements of a career development education program in a manner and sequence that thus totality represent one possible design for an educational system.

A. Fusing Career Oriented Concepts and Experiences into the Elementary School Curriculum

At the Elementary School level our intent should be two-fold: first, to enhance students' acquisition of basic academic skills by providing an alternate to the more abstract learning style which has so often become the major approach to learning in education; and second, to allow students to acquire positive attitudes toward work and an increased knowledge of self relation to work.

The nature of the activities provided students should be sequential in nature moving from familiarization with the kinds of occupations and activities within the students immediate environment of the home and school, to the immediate community, and later to the broader community. Activities should be both orientational and informational in nature and should also consist of opportunities for youth to perform simulated work tasks across the occupational spectrum.

In accomplishing or in implementing the program at the elementary school level one approach would be to fuse into the existing school curriculum those experiences that would serve as a base for enhancing traditional learning expected at this level and could also serve to accomplish certain career development objectives. Such an approach would prevent the creation of a new curriculum area for the elementary school.

Rather the approach that I propose is one of surveying existing objectives, materials, and activities already used in the elementary school curriculum to determine both those which do or could make a contribution to the career development program, and those learnings that might be enhanced through concrete career oriented ideas. Before seeking to merge additional objectives, materials, and activities into the existing elementary school curriculum, the first step should be the identification of those aspects of the present curriculum that with additional modification and coordination could contribute to the accomplishment of certain career development objectives. For example, in early elementary school students read and study about community workers. This experience could be broadened to include individual personal contact between students and several community workers. Such experiences would serve both to broaden student's

range of personal acquaintance with occupational role models and to provide concrete meaning to the symbols students are learning. The second step should include the identification of career oriented experiences of a concrete nature that would be suitable for integrating the different subject matter skills students are expected to learn at a particular level by applying them in "miniature work roles." For example, a classroom project dealing with woods would provide an opportunity for students to apply a number of basic academic skills. A brief outline of possible tasks to be performed reveals the potential that such a project might have for both trying themselves out in miniature work roles, and to apply and learn basic academic skills. A brief review of Chart I illustrates the amount of learning that could be involved in a career oriented experience.

Chart I

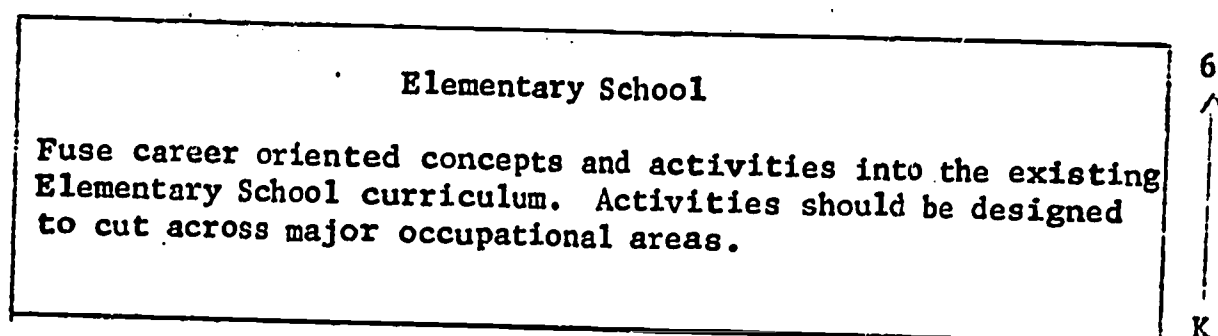


Chart II

TASK TO BE PERFORMED	IDENTIFY OCCUPATIONS WHO PERFORM THIS TASK AS AN ADULT	POSSIBLE LEARNING INVOLVED
Each student considers alternatives and decides on an individual project.	1. Look at the types of decisions people have to make in different occupations.	1. Provides an opportunity to discuss the decision-making process.
Each student decides on the materials to be used in the project.	2. Look at workers whose job depends upon their knowledge of materials, woods, textiles, metals, plastics, etc.	2. Students must learn about the strengths and durability of certain woods.
Each student designs his project and draws a one-inch scale replica.	3. Look at workers whose job is one of designing.	3. Students must learn about geometric figures, use of values, common and decimal fractions.
Each student identifies and writes in order tasks to be performed.	4. Look at workers who plan and identify work tasks for others to perform.	4. Students would need to use correct grammar and sentence structure.
Each student figures cost of material.	5. Look at job that involves cost estimating.	5. Students would have to apply appropriate math.
Each student identifies tools needed to perform task.	6. Examines, identifies, and reads about occupations in which different tools are used.	6. Student should learn the scientific principles underlying the different tools.
Student constructs the project.		7. Student writes a narrative description of his project.

B. Providing an Across-the-Board Exploratory Program at the Lower Junior High Level

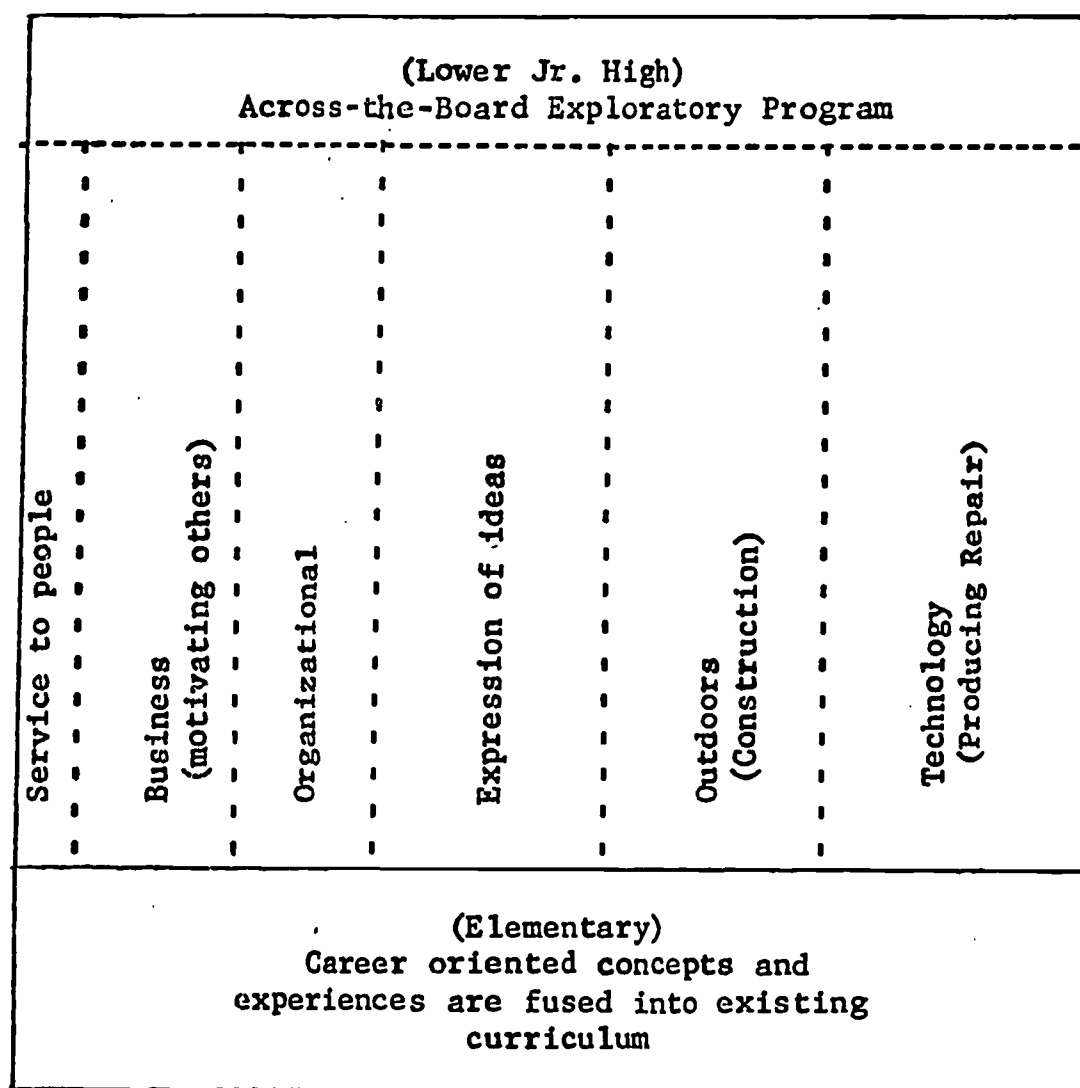
All students should have an opportunity to explore the several broad occupational areas such as those presented in Chart IV before being forced to explore one broad occupational area in considerable depth. The intent of an across-the-board exploratory program would be to allow the student to acquire a base of experience, knowledge and skills for future decision-making, and to make a tentative choice of a broad occupational area for in-depth exploration. Such a program allows students to make a tentative choice from the broadest possible range of experiences and knowledges. Exploratory programs, in which students are allowed to rotate through the trade offerings of Bricklaying, Carpentry, Machine Shop and Automotive Machines on a six-week basis, limit rather than broaden the base of knowledge and experience from which the student is allowed to choose such a program does not meet the intent of an across-the-board exploratory program.

An example of an across-the-board exploratory program is the Program of Education and Career Exploration (P.E.C.E.) for seventh, eighth, or ninth grades. This program was initiated in twenty Georgia schools in the fall of 1969. Program content is organized around work roles. Using Roe's¹ occupational classification system, occupations are divided into six categories of interest which are to some extent arranged in a continuum from an orientation toward working with people to an orientation toward working with things. The six major occupational interest groupings are service, business, organizational, expression of ideas, outdoors, and technology. Students are systematically exposed to real or simulated work experiences within these occupational areas. After experiencing a work role, the student shares his observations with other students in small guidance groups where attention is focused on questions like these. How did I feel about myself while involved in the work role? What are other jobs in our society that might provide similar satisfaction? What are the different decisions one would have to make in order to enter a particular job? What value does the work role under question have economically as well as socially to society? What educational avenues could prepare one for a particular job? This process is repeated each time the student experiences a work role.

These work observations are supplemented by career development films and guidance units conducted by coordinators who were given special university preparation during a nine summer quarter. Their training experiences consisted of group dynamics and experiences simulating those in which students participate during the school year.

¹Roe, Anne, The Psychology of Occupations, John Wiley and Sons, Inc., New York: August, 1965.

Chart III



C. Providing an In-Depth Exploratory Program (Prevocational) at the Upper Junior High and Early High School Level

Following participation in an across-the-board exploratory program all students should have an opportunity to further explore a selected broad occupational area in depth for the purpose of (1) converting a generalized choice into a specific choice; (2) participating in experiences and activities necessary to aid students in the classification and further differentiation of an area in order to decide if one of the families or clusters of occupations considered would be appropriate for him to consider further; (3) being exposed to the content, tools, settings, products, or services of a particular occupational area; and (4) developing certain generalized vocational skills.

For many students, in-depth exploration can be facilitated through prevocational programs built around (1) industrial occupations; (2) home economics related occupations; (3) agriculture and outdoors occupations; (4) business and

distributive occupations. Contained in Chart I. is a possible breakdown of the occupational family or cluster in areas that students would consider in greater depth. Other curriculum areas can also provide opportunities for further exploration.

A middle or junior high school model for career exploration that allows the students to first differentiate among the several broad occupational areas and second to differentiate among the different occupational clusters, or families that make up a particular occupational area enables the student to move from the global to a narrow focus which seems to fit what is known about the nature of career development.

In structuring a prevocational program to accomplish stated objectives a three dimensional approach is proposed. First, decide on the occupational cluster or families to which students will be exposed. Second, decide on what specific behavioral outcomes you expect of students as a result of the program. Chart III suggests one means for categorizing behavioral outcomes. Third, identify learning activities that would allow students to acquire behavioral outcomes from an integrated frame of reference, rather from a segmented or isolated point of view. It is proposed that students be allowed to participate in projects that would enable them to perform tasks, solve problems and make judgments which are typical of those performed by individuals employed in the occupations under consideration.

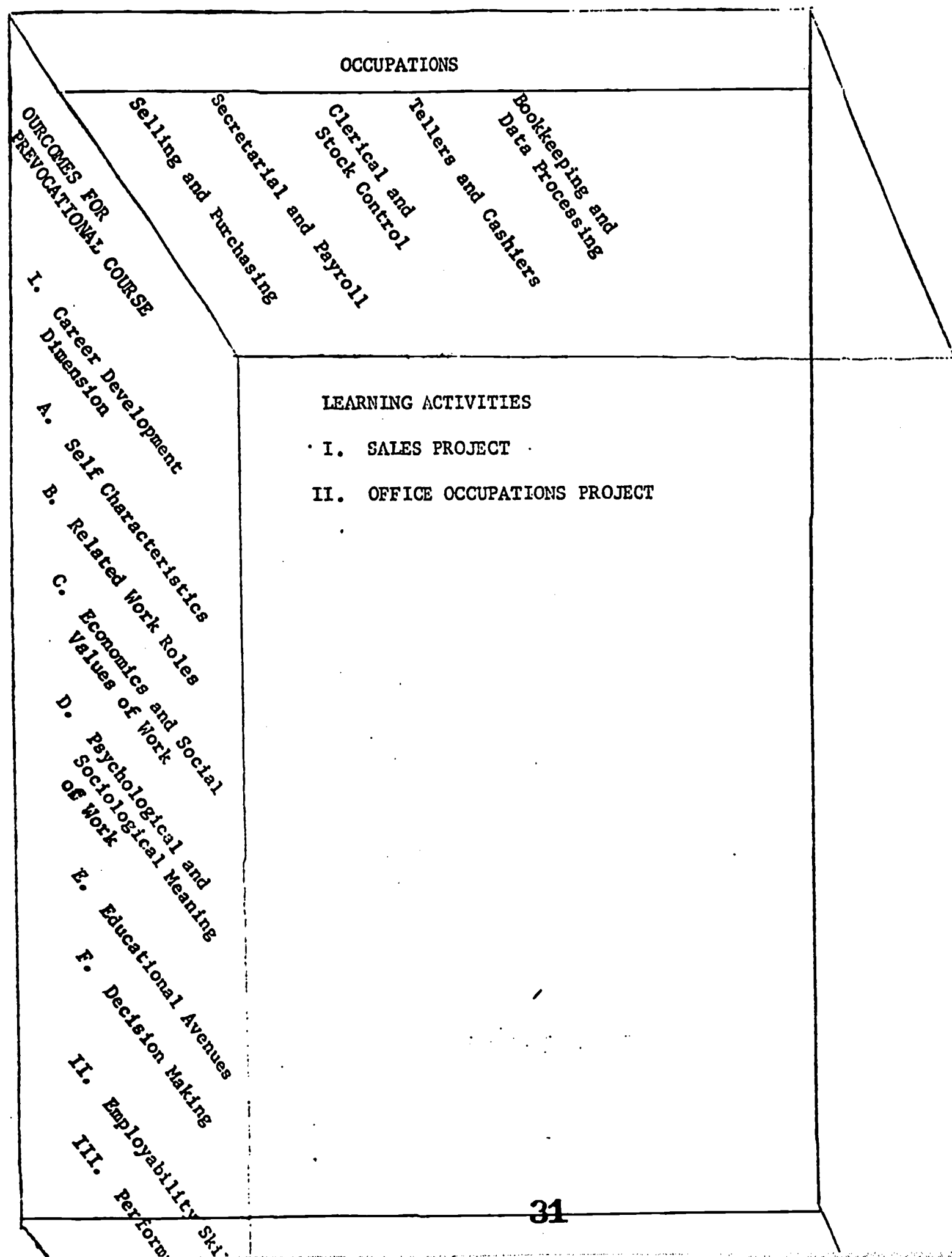
The prevocational program should provide a base of experience through which students are able to gain greater self-understanding in relation to a particular broad occupations area. The program should offer a variety of experiences in an organized laboratory that simulates to some extent the work setting and in which students are allowed to work with the tools, materials, processes, and products peculiar to that work setting. Thus the nature of the prevocational curriculum is such that it provides an opportunity for students to try themselves out in a variety of simulated work roles. To maximize the use of such experiences, time must be provided for students to examine the experiences in terms of the several dimensions of career development previously referred to under the objectives. This could be accomplished through a team approach involving the counselor and prevocational teacher in which activities to be performed by each are identified.

Chart IV

(Upper Jr. High)				
Prevocational				
Industrial	Home Economics	Business and Distribution	Agriculture and Outdoors	
<u>Industrial Organization and Management</u> <u>Drafting</u> <u>Woods</u> <u>Metals</u> <u>Electricity</u> <u>Mechanics</u> <u>Graphic Arts</u>	<u>Production Process</u> <u>Personal Development</u> <u>Food Services</u> <u>Child Care Services</u> <u>Clothing Services</u> <u>Housekeeping Services</u> <u>Health Services</u>	<u>Selling and Purchasing</u> <u>Secretarial and Payroll</u> <u>Clerical and Stock Control</u> <u>Money Management</u> <u>Bookkeeping and Data Processing</u> <u>Retail Wholesale Trade</u>	<u>Production Agriculture</u> <u>Off Farm Agriculture</u> <u>Horticulture</u> <u>Forestry</u> <u>Recreation</u>	Other Curriculum Areas
(Lower Jr. High)				
Across-the-Board Exploratory Program				
(Elementary)				
Fused into Existing Curriculum				

Chart V

MODEL FOR A PREVOCATIONAL PROGRAM



D. Providing Students with Entry Level Job Skills in a Family or Cluster of Occupations--(Secondary 10-12)

The aim of the vocational program at the secondary level should be either to prepare the individual for entrance into some job at some level, or for post-secondary vocational and technical education. The specific objectives should include helping students to (1) develop plans for implementing his vocational preference, whether it be entering work after high school or continuing his education; (2) execute these plans by appropriate course work and job experiences and obtaining an entry-level job or entrance into further education or training.

The nature of the vocational program at this level should consist of cooperative program, laboratory or a combination of both. At previous levels the use of these kinds of experiences were for the purposes of exploration or for the development of employability skills; whereas, at this level the use of these experiences would be for the purpose of job preparation.

Chart VI

(Secondary 10-12)															
Advance Placement Post-Secondary Education										Work Experience (Co-op)					
Construction	Transportation	Drafting and Design	Metal	Electromechanical	Electrical	Food Service	Personal Services	Child Care	Textile	Office Occupations	Marketing and Distribution	Horticulture	Agri-Business	Production Ag.	Forestry
(Upper Jr. High) Prevocational															
Industrial				Home Economics				Business and Distribution				Agriculture		Other	
(Lower Jr. High) Across Board Exploratory															
(Elementary) Fuse career oriented activities into elementary school curriculum															

The vocational curriculum structure at this level should be designed to prepare the individual for entrance into a family or cluster of occupations or for post-secondary education. To accomplish this will require a broader curriculum design than has usually been the case at the secondary level. Chart VI illustrates some of the cluster areas being implemented in Georgia. Most youth are not mature enough to narrow down to find occupational choice by the 10th or 11th grade level.

Structuring curriculum on a cluster basis one would not purport to turn out finished craftsmen or technicians in any or all of the specific occupations comprising a particular cluster, but provide students with first level tasks needed by an individual upon entering an occupation. Those students who desired more intensive training in a specific task occupation before entering work could obtain this through concentration in a particular area, through a cooperative program at the senior level, or entrance into a post-secondary area vocational-technical school.

Most youth are not mature enough to narrow down a specific occupational choice by the 10th or 11th grade level. Structuring vocational curriculum along a cluster basis at the upper grade level provides a next logical step from the prevocational programs that were described. Maley () states that the cluster can be defended on a number of points:

"The cluster concept affords a greater degree of occupational exploration on the part of the student. The student is not channeled into a single occupation, it provides him with a broader arena of self-exploration in a series of related occupations.

"The program in its multi-occupational direction provides a more valid and consistent educational experience relative to current techniques and instruments in the field of interest identification and assessment. Thus the rationale for a direct educational experience with a range of related occupations appears defensible for most students who have no real or concrete bases for decision making along the lines of selecting a specific trade.

"The cluster concept program is aimed at vocational competence in an age of great geographical mobility. Vocational education can no longer be planned solely in terms of the community in which a high school exists. Over half of the average school's graduates will migrate to another community, and will go to another state.

"Another argument for the cluster concept can be made in terms of the need for mobility in jobs within any industry or occupation. Dr. Russell stated that 'to the extent that the school tries to develop employable skills, it should not attempt to train persons for specific jobs that are only temporarily open.' The cluster concept provides within its framework, opportunity for a broad field of skill development as well as the potential for a sound program of basic education.

"The cluster concept as proposed by this writer would open the field of vocational education to that substantial body of students enrolled in the general curriculum. This is the group that has traditionally been overlooked and neglected in school systems that offer vocational general, and academic curricula. The proposed cluster program in vocational education with its two periods per day could easily be part of the general curriculum student's program. It could thus provide richer employment opportunities for the student, yet permit him to remain in the main stream of the educational program of the school. It is this form of 'openendness' that is so important an advantage--from the viewpoint of the aspiring parent as well as to the student."

The secondary program should be so structured that it is flexible enough to meet the varying needs of individual's from different socio-economic levels. The following are examples of the type of flexibility that should be built into the program.

1. The vocational curriculum should be organized on a quantity basis to allow for frequent in-put points and to allow for concentrated preparation just prior to school separation for those who have reached that point without a job skill.
2. The vocational curriculum should provide for varying class length in order to enroll the student who thinks he plans to enter college.
3. The vocational curriculum structure should provide for coring within a vocational service area or across vocational service areas in order to provide maximum career options to students.
4. The vocational staff should be employed on a twelve month's contract in order to make maximum use of resources and to serve the maximum number of students.

E. Articulation from the Secondary School to Work or Post-Secondary Education

The guidance program as well as the curriculum should receive special attention. Guidance programs for noncollege-bound youth should be as well developed as programs for college-bound youth. Current school guidance programs are typically geared to college-bound youth. The neglected majority also need special assistance in planning for work or for post-high school training. Students are reminded constantly of the necessity to master certain curricular experiences in order to get into college. The same association should be built between school and work. Counselors usually have in-depth knowledge about those colleges which their students are most likely to attend, and they spend many hours assisting students to identify the pros and cons of attending different colleges. The counselors should have similar knowledge of businesses and industries which their students are likely to enter, and they should assist students in examining such information in relationship to their abilities and interests.

Volumes of college materials are available to provide information regarding entrance requirements, curricular options, student life, and financial costs. Likewise, profiles of major businesses and industries within a given region should be developed to provide the student with detailed information about entrance requirements, salaries, and procedures for obtaining employment with these concerns.

College-bound students are assisted in making every decision involved in entering college--completing the application form, taking the College Boards and being interviewed by the college admission officer. The student who plans to begin work should be provided with similar assistance. The job placement service should be given as much attention as is given to college placement. A well functioning job placement service would greatly improve the terminal student's image of the school. Imagine the effect of having twenty-five or more employers enter a school to interview students for jobs. Students would likely come to believe that the school was the best place to be in order to get a good job, and teachers would likely appreciate more keenly the needs of the noncollege-bound student. Furthermore, administrators would likely spot the inappropriateness of much of the school's program for vocational students.

The job placement service can best be administered by a central office since it is virtually impossible for a single school to employ sufficient staff to maintain current, accurate information regarding occupational opportunities. The central office should gather and disseminate information about job openings, solicit the interest of local business and industries in qualified students, perform job clearance, conduct follow-up and evaluation studies, and provide in-service training for staff development.*

Vocational programs at both the secondary and post-secondary levels should develop admission procedures to assist high school counselors to more effectively advise vocational students. College-bound high school students have available to them much more predictive information in regard to their chances of success in college than do their counterparts who plan to enroll in technical programs. The Educational Testing Service and the College Entrance Examination Board are

* Georgia has a statewide job placement system for post-secondary vocational-technical schools, and Cleveland, Ohio, has a citywide job placement program.

Chart VII

Work					Post-Secondary Education				
Job Placement					Transition to Next Step				
					Post-Secondary Placement				
Construction									
Transportation									
Drafting and Design									
Metal									
Electromechanical									
Electrical									
Food Service									
Personal Services									
Child Care									
Textile									
Office Occupations									
Marketing and Distribution									
Horticulture									
Agri-Business									
Production Ag.									
Forestry									
(Upper Jr. High) Prevocational									
Industrial									
Home Economics									
Business and Distribution									
Agriculture									
Other									
(Lower Jr. High) Across Board Exploratory									
(Elementary) Fuse career oriented activities into elementary school curriculum									

developing and validating a test battery that can be used to predict student success in the different offerings of the vocational-technical schools. This battery could be administered in high schools as the college entrance examinations are currently administered. While some students prepared to take the College Boards, others would prepare to take the test for the vocational-technical school.

F. Comprehensive Post-Secondary and Adult Education

Our aim must be dual. It must be: (1) to prepare for initial entrance and to upgrade individuals for employment in highly technical and skilled occupations; (2) to provide more basic and short-range vocational programs to prepare large numbers of individuals for employment (individuals who have reached adulthood without the skills necessary to pursue higher level technical and skill training).

The curriculum structure must be formed to serve both groups at the same time, and often under the same instructor simply because this is the only way we can maximize the use of our vocational resources.

As we look at the present structure of the vocational program at the post-secondary level, we will find a variety of settings. However, there is a real danger to post-secondary vocational and technical education and that is that it may become so institutionalized that it fails to meet the needs of many individuals in our society.

G. Utilizing Concrete Experiences For Career Development

The central learning activity provided students in the elementary exploratory, and prevocational phase must include experiences (Chart VIII) that allow students to either try themselves out in an occupation through either a simulated or direct work role or the opportunity for extensive observation in the actual work setting. Work observation must be more extensive than the traditional field trips. For example, a student might select to spend the weekend in a hospital observing the activity of the laboratory technician. At the secondary level concrete experiences are used for the purpose of teaching job skills. As the student moves from K through post-secondary concrete experiences form a thread of experiences that are used to form a continuum of learning experiences which at the lower grade level focuses on orientation and exploration and at the upper grade level on job preparation and specific job preparation.

Chart VIII

Work Post-Sec. Placement next step				The central learning activity should include those of a more concrete nature		
(10-12) Secondary Co-op Clusters						
(8-10) Prevocational Program						
Industrial		Home Economics Related	Business and Distribution			
Agriculture and Outdoors						
(7-9) Across-the- Board Exploratory Program						
(K-6) Elementary Fuse into exist- ing curricu- lum						

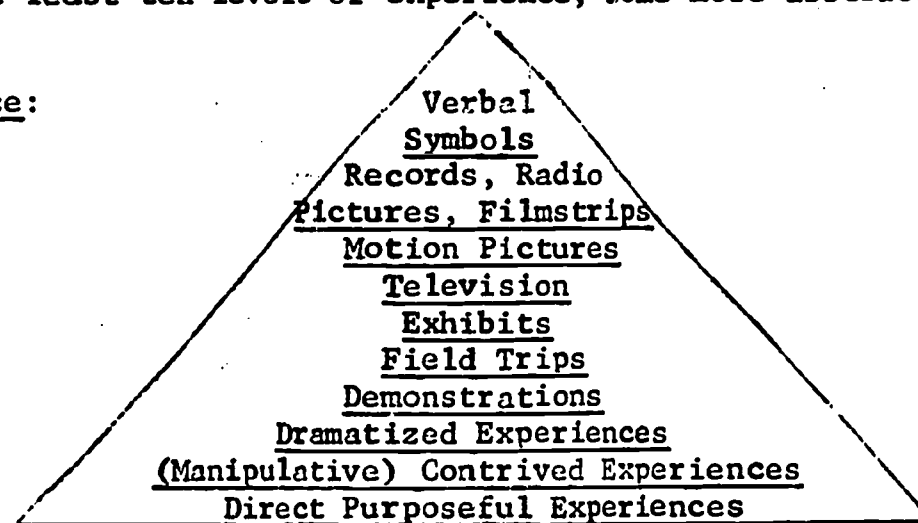
Kaplan (1968) states that "the various approaches to exploratory programs can be classified on a concrete-to-abstract experience continuum depicted in the illustrated 'cone of experience.' This cone graphically portrays how it is possible to provide at least ten levels of experience, some more abstract or concrete than others.

Cone of Experience:

Abstract



Concrete



"Most approaches to exploratory programs have relied heavily on the experiences at the cone's apex. This, of course, has been the school's traditional approach in almost all its offerings. Thus, approaches utilizing the written and spoken word, plus photographs, have prevailed. Those which have attempted to be more concrete, along the types denoted at the base of the cone, have been less in evidence. Yet, educators who have utilized these latter approaches have claimed they are by far more meaningful and effective." Such concrete experiences provide students with a first-hand knowledge of the world of work; they will experience the smells, sounds, and sights of the working environment as well as the pride that comes from a finished product. How much better this learning experience is than the stilted, often boring, often outdated information offered in many textbooks. From this base of experience it will be much easier for students to predict their own suitability for similar types of jobs.

Greater use must be made of simulated or direct work experiences and of work observations that allow the student to come into contact with ideal role models offered through vocational education as a means of facilitating students' career development. Career development theory emphasizes the importance of providing youngsters experiences which enable them to identify and try on suitable work roles. Such experiences provide a real situation against which the individual can test out his aptitudes, interests, and values, as opposed to assisting an individual understand himself solely from psychological tests.

Framers of the 1968 Vocational Education Amendments recognized that vocational education can provide the "base of experiences" to serve to facilitate the career development of youth at different levels. We recognize this because the definition of vocational education was changed to include activities to promote educational and vocational decision making. Once the student has experienced a work role, it will be much easier for him to analyze it in relation to himself. From this base of experience the student could more likely predict the suitability of jobs which offer similar satisfactions, and from this understanding he could identify the type of education needed to obtain a particular job.

H. Personalizing Concrete Experiences In Terms of Six Dimensions of Career Development

Students at all levels must be provided an opportunity to personalize the meaning of career experiences in terms of the different dimensions of career development. That is, a youth must be allowed to examine these experiences in terms of their present and future implications for him. The different dimensions of career development portrayed in Chart IX provides a comprehensive approach for enabling youth to examine their experiences. In the objectives I attempted to show the type of understandings that students should possess at different levels.

One way to assist youth to personalize career experience is to bring together in meaningful ways experiences in vocational education (the hands on experience) with the counseling skills and understanding possessed by the counselor. Yet, both fields have too often failed to recognize the resources of the other and to recognize that a fusing of their resources would strengthen the outcomes obtained by each.

Too often those in the fields of vocational and practical arts have acted as though they assume that "participation along" in either simulated or direct work experience, or the "giving of information" would provide the student with a sufficient base for making vocational choices. It cannot be assumed that such experiences will automatically be internalized and brought to the conscious level in such a manner that they are maximized in helping the individual acquire a more adequate perception of himself in terms of the world of work. Too often the potential that such experiences have to enhance greater self-understanding in relationship to the world of work is lost because the individual is not provided assistance--counseling if you please--that enables him to personalize the meaning that such experiences have for him and for his future. Not only do youth need appropriate information and experiences, but attention must also be given to the individual's capacity to receive, process and use information in an insightful manner.

The fusing of counseling with such experiences would, in my opinion, result in students who possess greater understanding of concepts and vocabulary regarding their abilities, values, opportunities, and options that are available to them. Thus, the individual's acquisition of tools with which he can think about himself in relation to education and occupational options should increase the individual's decision-making ability. However, it should be emphasized that many counselors have acted as though they assumed that through "incidental experience" the individual would acquire sufficient base of knowledge for arriving at a "reasoned choice," provided the individual was assisted in examining his previous experiences and possible future options in light of their appropriateness for him.

Beyond such "incidental experiences" in guidance we have relied primarily upon the printed materials contained in the occupational file and an occasional career day or day on the job. Thus, in some instances counseling sessions are "discourses in ignorance." The individual has neither the understanding of self in relation to broad work roles to draw upon, nor the understanding of concepts and vocabulary that he can draw upon as tools in thinking through his course of action. If youth, and in particular work-bound youth, are to relate to different

CHART IX

Personalizing experiences in terms of six dimensions of career development		Work Placement Next Step	Post-Secondary
		Co-op	(10-12) Secondary Senior Plan
		Clusters	
	(1) Evaluating self characteristics	Prevocational	
	(2) Exploring broad occupational areas	-----	
	(3) Educational avenues	Industrial	Home Economics
(4) Decision making	Business and Distribution	Agriculture and Outdoors	
(5) Socio-economic value of work	Other	-----	
(6) Psychological meaning of work	Across-the-Board Exploratory		
	(K-6) Elementary		
	Fuse Into Existing Curriculum		
		Concrete Experiences	
		The central learning activity should include those of a more concrete nature	

roles; to test expectations of self characteristics--interests, abilities, values; etc.--in particular work roles, to consider and differentiate future decision points and alternatives; they must be introduced to activities and approaches which go beyond the traditional vicarious stereotyped approaches of printed materials, audio-visual aids, etc.

These types of experiences have a place, but only as part of a comprehensive and systematic program. The school must not only provide an opportunity for the expression of personal characteristics important to career development it must deliberately set out to develop them.

To obtain maximum utilization of the potential that rests in these two fields may require that counselors obtain more of the training of vocational educators, and vocational educators obtain more of the training of counselors.

I. Relating Concrete Career Experiences to Other Subject Areas

Experiences used to facilitate the career development of many students can also be used to enhance their acquisition of other skills and understanding. To utilize career development experience for this purpose will require bringing together the promising programs and practices of vocational education with the broader school curriculum as shown in Chart X.

For many youth, particularly those who might be classified as disadvantaged or potential dropouts, a horizontal curriculum structure which has, as its core, concrete vocational experiences* around which other school disciplines are organized and carried out in a climate of commitment to help each individual to succeed might just be the means for changing education outcomes for these youth. Two generalizations can be made that render support to such a school structure.

First, most learning experiences in school are of an abstract nature. The learning style and background experiences for many students are such that they cannot achieve in the abstract learning experiences established by the school. Vocational experiences can serve as a vehicle for teaching basic academic skills to such youth. The National Advisory Council on Vocational Education (1968) recommends that vocational experiences serve as a core around which the academic education package might be structured. Such an approach would allow the school to take advantage of the natural motivation that exists on the part of many youth toward work and could serve as a vehicle for organizing the total school curriculum so that it has psychological meaning to the student.

Second, heretofore the basic solution which is most often mentioned for serving these students has been to put them in vocational education while the remainder of the school accepts little responsibility for them as in the modification of the content or teaching approach. It would be a mistake to assume that the solution to the problem for the disadvantaged could be solved by vocational education without modification in both the vocational program and other segments of the school program. To do so would probably serve to complicate the inequalities already felt by the disadvantaged student.

*Here vocational experiences are used synonymously with exploratory experiences.

CHART X

Personalize experiences in terms of six dimensions of career development	Work Post-Secondary Placement Next Step	Concrete Experiences	Interlock concrete experiences with other subject matter disciplines of math, science, and communication skills through either a: Natural Interlocking or Forced Interlocking
	(10-12) Secondary Co-op Senior Plan Clusters		
	Prevocational Programs		
	Across-the-Board Exploratory		
	(K-6) Elementary Fuse Into Existing Curriculum		

In order to utilize the concrete experience of the vocational program as a vehicle in teaching the basic academic skills will require a modification in the curriculum structure from a narrow vertical design where the focus is on the subject matter content to a horizontal design where the focus is on making the total school experience meaningful to the student at a given point in time. The contrast is illustrated in Chart XI.. Forced interlocking of academic subjects and vocational experiences involves determining those academic skills and knowledges needed to perform or can be taught from vocational experiences or direct work experiences and it involves sequencing experiences so that academic knowledges are being applied in the vocational program at the same time they are being taught in the related class. For other youth "natural interlocking" of the vocational experiences with other subject matter areas may serve to make their educational experience more meaningful. In this situation teachers can relate their experiences where it is natural to do so.

J. Maximizing the Potential for Each Student to Succeed

To arrange a school cimate that provides an equal opportunity for each student to learn with his own uniqueness will require a basic change in the posture of educators regarding the bases from which one operates in designing school experiences. Too often our posture has been one of devising programs and serving those who could benefit from the program as established. Such a strategy is still the mode rather than the exception even within vocational education as illustrated by one of Prosser's 16 Theorems, which is still often quoted, and I quote:

"Effective vocational education for any profession, calling, trade, occupation or job can only be given to a selective group of individuals who need it, want it, and are able to profit from it."

This statement places emphasis on the program and not on the student. The emphasis is on the student changing rather than on program modification. I would suggest as a reference point for developing career development programs at the middle or junior high school level the following statement.

Effective education or vocational education for any or all individuals involves the designing and executing of programs in such a manner that those who need it are able to profit from it and succeed at it.

This statement places emphasis on designing programs from which students can profit. The emphasis is not on a single program, but on the designing of many programs which are executed in a variety of ways to serve all. No longer can the focus be on devising programs and services just for those who can benefit. The school must establish a climate in which the focus is on making the school experience a meaningful one for each student.

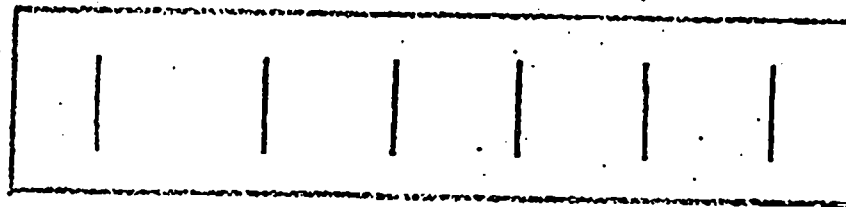
K. Staffing for the Purpose of Interlocking Academic and Vocational Curriculum

In order to coordinate other subject matter disciplines around concrete vocational experience, a staffing pattern will be required that allows for a team of academic and prevocational or exploratory teachers to work together. One approach would be to initiate a modified form of differentiated staffing.

CONTRASTING CURRICULUM STRUCTURE

Vertical

Grade 12



Grade 1

Focus is on logical
sequence of content

Horizontal

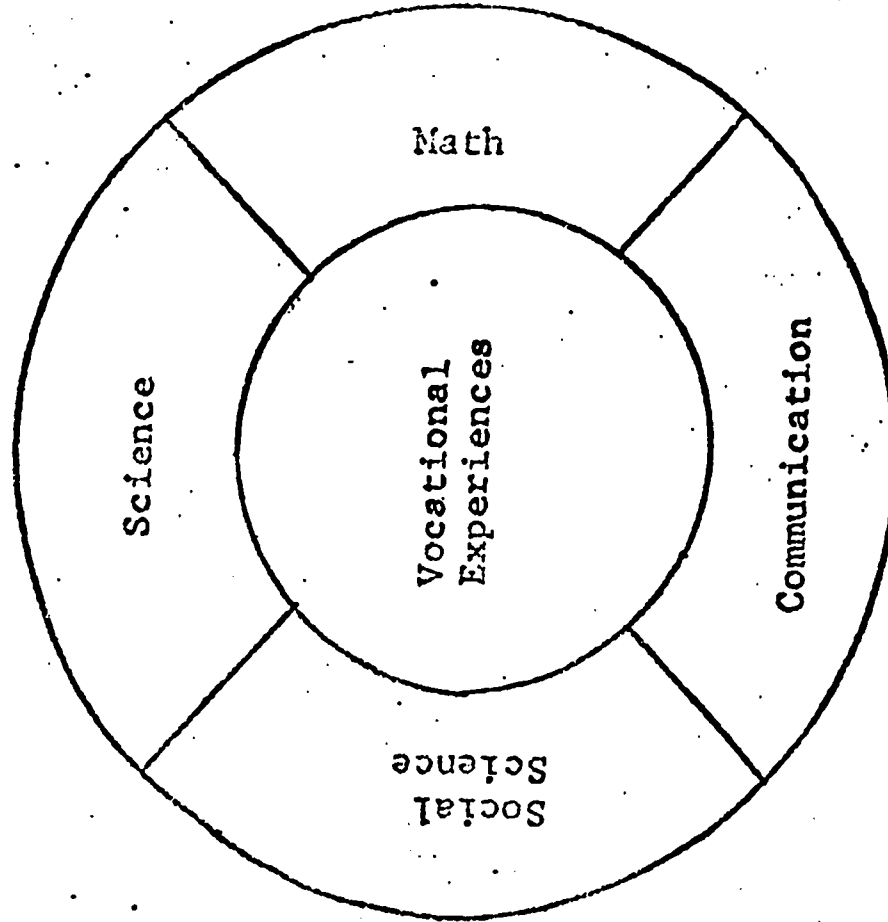


Chart XII suggests a possible differentiated staffing model for interlocking academic, and exploratory, prevocational and vocational curricula to maximize their potential to the education of the individual. Such a model might contain three levels of staff: a teacher coordinator, teachers, and teacher aids. A teacher coordinator's responsibility would be to coordinate and to plan with a team of exploratory or prevocational and academic teachers, including counselors, ways for organizing the other subject matter disciplines around the concrete experiences of the vocational program. The teacher coordinator would be especially trained for his position; he may or may not be a vocational educator. He would be responsible for teaching at least half time. It would seem that such a model would have considerable potential for serving disadvantaged and handicapped youth.

L. Recognizing Individual Differences

Career development programs must be organized to be flexible enough to meet the needs of all youth. It should be recognized that some youth may only need one semester in a prevocational program while others may need to be in such a program for three years. Some youth may decide after a quarter that they desire to transfer into another vocational area. Experiences provided to different youth must vary according to their level of development.

M. Exploiting the Career Implication of Each Curriculum Area

Although certain teachers, staff or courses may place major emphasis on accomplishing career development objectives, each staff member should and must purposefully examine his subject matter area and exploit its potential for career development. This should be carried out in such a manner that efforts to show relationship between certain subject aspects and occupations will also enhance efforts to teach the subject matter skills. One approach would be to assign students action assignments in which they have to apply a particular concept in the same way that a person employed in a job would. Such an experience should make the student familiar with the occupations and with the value of understanding the concept in question.

N. Obtaining Staff and Administrative Commitment

The administration and staff must be committed to: (1) the dignity and worth of all types of education and all jobs; (2) judging education and occupational choices in terms of their worth to the individual rather than according to some scale; and (3) the value of all types of learning and abilities.

The model that has been outlined suggest major changes in the structure, content, and process of a K through post-secondary career education program. Implementation of the model would require maximum staff involvement in the further conceptualization of the program and in working through implementation procedures. In particular, attention must be devoted to curriculum designing, sequencing, and development that cut across subject matter areas in efforts to ways in which each subject can reinforce the other around a career theme. New staffing and

CHART XII

DIFFERENTIATED STAFFING FOR THE PURPOSE OF
INTERLOCKING ACADEMIC AND PREVOCATIONAL CURRICULUM

Level

1

Teacher Coordinator

2

Communications
Teachers



Counselors



- (a) Interlock academic and vocational curriculum
- (b) Staff utilization
- (c) Planning and scheduling activities
- (d) Curriculum materials development
- (e) Evaluation

Math
Teachers

Vocational
Teachers

Science Teachers

3

Teachers Aids

<p>(1) Differentiated staffing pattern</p> <p>(2) Recognition of individual differences</p> <p>(3) Exploiting the career implication of each curriculum area</p> <p>(4) Staff and administrative commitment</p> <p>(5) Staff preparation</p> <p>(6) Resource materials</p>	<p>Personalize experiences in terms of six dimensions of career development</p> <p>Provide students with concrete experiences</p>	<p>Guidance</p>	<p>Work Placement Step</p> <p>Post-Secondary Next Step</p>	<p>Other subject areas</p> <p>Interlock concrete experiences with other subject matter areas</p> <p>Maximize the potential for each student to succeed.</p>					
			<p>(10-12) Secondary</p>						
			<p>Clusters</p>						
			<p>Prevocational Programs</p>						
			<table><tr><td>Industrial</td><td>Home Economics</td><td>Business and Distribution</td><td>Agriculture</td><td>Others</td></tr></table>		Industrial	Home Economics	Business and Distribution	Agriculture	Others
			Industrial		Home Economics	Business and Distribution	Agriculture	Others	
			<p>Across-the-Board Exploratory Program</p>						
<p>(K-6) Elementary</p> <p>Fuse Into Existing Curriculum</p>									

scheduling patterns would have to be worked out. All of the staff would have to become more knowledgeable of: (1) the world of work and in particular how their subject matter areas relate to particular jobs; (2) career development concepts and understandings; and (3) other subject matter areas.

O. Curriculum and Resource Materials

The performance of a career development program will require that considerable attention be given to curriculum and materials development. Curriculum development efforts must involve the counselor, as well as the vocational teacher, and teachers from other subject matter areas. This will require curriculum development efforts different from the single subject orientation approach of the past.

TOPIC VI

Summary and Recommendations

In order to develop a career development programs from K through post-secondary level the following recommendations are offered. It is recommended that:

- A. A career theme represents a core around which other school experiences might be organized and made meaningful for many students.
- B. Schools recognize that students at all levels of education have career development and choice-making needs and that schools deliberately develop and execute plans to meet these needs.
- C. Vocational educators and guidance personnel join their resources with those of the total school and community in the development and implementation of a comprehensive educational program with career development having a major thrust.
- D. Flexible program designs for career development be initiated so that students with varying levels of needs, abilities, and maturity can be served.
- E. The career development program be for all students, and be designed so that students move sequentially from one level to the next.
- F. Objectives for the career development be specified in behavioral terms and understood and accepted by the school and community.
- G. Concrete experiences in simulated work roles, direct work experiences, or extended on-the-job observations serve as the base for exploratory and prevocational programs.
- H. An interdisciplinary approach be used in conducting the career development program and that staff preparation include both classroom instruction and direct confrontation with the world of work.
- I. Students be allowed to personalize their experiences with individuals who possess counseling skills and a counseling attitude.
- J. The concrete career experiences be designed to enhance academic learning by providing students with immediate application for other school learnings.
- K. A school climate be created that provides each student with an equal opportunity to succeed.